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Governance and Returns on Investment

An Empirical Investigation

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There is a strong statistical link between a country's civil liberties and the performance of its aid-financed government investment projects. But type of political regime (whether authoritarian or democratic) and the status of more purely political liberties do not appear to significantly affect project performance.

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Summary findings

Using data from the World Bank's Operations Evaluation Department, Isham, Kaufmann, and Pritchett examine the link between the performance of Bank-financed projects and various indicators of country governance. They find that:

- There is a strong statistical, and possibly causal, link between civil liberties and project performance. After controlling for a variety of determinants of project performance, they find that in countries with the best civil liberties records projects have an economic rate of return between 8 and 22 percentage points higher than the rate of return in countries with the worst civil liberties. (The average rate of return in the sample is 16 percent.)
- The type of political regime (whether authoritarian or democratic) and the status of more purely political liberties do not appear to significantly affect project performance.

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Governance and the Returns to Investment:

An Empirical Investigation

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Governance and the Returns to Investment: An Empirical Investigation[1]

Introduction

The quality of governance is widely thought to be an important determinant of a country's economic development (Brautigam 1992)[2]. However, to find convincing empirical evidence of the effect of governance on economic performance is a challenge. Definitional and measurement issues plague both the evaluation of inputs--what is the appropriate measurement of good governance?--and of outputs--what is the effectiveness of government?[3]. We are able to make empirical progress in exploring the connection between the governance and economic performance only by severely limiting our focus. We first isolate one observable indicator of economic performance: the returns on investment projects of governments that were financed by the World Bank. We then relate this performance indicator to just two limited dimensions of governance: a) the degree of civil liberties; and b) the political regime type and the degree of political liberties. Despite the serious definitional and measurement problems with each of these indicators (discussed

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[1] Isham: the IRIS Center at the University of Maryland. Kaufmann and Pritchett: the World Bank. We would like to thank Deon Filmer and Phil Keefer for helpful comments. One caveat, although standard, deserves special mention given potential sensitivity of the topic: all views presented in this paper are exclusively those of the authors and do not necessarily reflect those of the World Bank.

[2] For instance, the World Bank's policy statement on governance and development summarizes: "Good governance is central to creating and sustaining an environment which fosters strong and equitable development, and it is an essential component to sound economic policies." (World Bank 1992).

[3] Creating an objective measure of the efficacy of government action is plagued by both normative disagreements about the appropriate aims of government policy and positive disagreements about the instruments empirically likely to achieve any given aim. For example, a government may be very effective (and even cost effective in the limited sense of achieving a given objective) at banning imports; yet this is a policy which many may regard as an ineffective and inefficient (in the broad sense) action for a government to undertake. See Putnam (1993) for ingenious attempts to avoid these problems and measure government efficacy.

as they arise) we feel that the data are of sufficient quality and interest to merit examination.

The first section describes the data (particularly the data on project performance), establishes the basic specification of the determinants of project performance excluding governance variables, and introduces our classification of governance variables. The second section establishes the positive link between the degree of civil liberties and project performance and argues that this relationship is causal. The third section shows the lack of such a relationship between either political liberties or political regime type. The fourth section discusses the interpretation and implications of the empirical results. The conclusion, as is customary, concludes.

II. Data description, basic specification and results

A. Project data

The data on the performance of projects is assembled by the World Bank's Operations Evaluation Department (OED)[4]. After each World Bank loan is fully disbursed--typically 5 to 8 years after the opening of the loan--Bank and borrower country staff write a Project Completion Report (PCR) to assess project performance[5]. As one part of this assessment, two performance

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[4] We do not differentiate projects financed by the IBRD (International Bank for Reconstruction and Development) loans, which are relatively "hard" loans at near commercial terms, and IDA (International Development Association) credits, "soft" loans restricted to the poorest countries. Private sector IFC (International Finance Corporation) loans are not included in this analysis.

[5] The PCR--recently rechristened the Implementation Completion Report--is usually written by a staff member in the division that supervised the loan, but not by anyone with major project responsibilities. As such, the incentives of the staff to dissemble about project performance, while present, are not overwhelmingly strong.

indicators are created. For all projects, OED staff assign an overall performance indicator on whether the project was 'satisfactory' or 'unsatisfactory' in achieving its development objectives. For those projects in eight economic sub-sectors where the stream of project benefits can be readily quantified and valued--infrastructure, agriculture, industry, energy, water, urban, transport, and tourism--Bank project staff, sometimes in collaboration with OED staff, calculate an *ex post* economic rate of return (ERR)[6].

The ERR is the discounted stream of project costs and benefits over the life of the project, evaluated at economic (as opposed to financial) prices. Typically, it is calculated by roughly following the methodology of Squire and van der Tak (1975)[7]. The *ex post* ERRs are typically calculated about two to three years after project completion, in contrast to *ex ante* ERRs which are calculated when the project is first assessed[8]. Thus, at the time the *ex post* ERRs are calculated, project evaluators know the actual investment costs and are somewhat better informed about actual operating costs and demand; but they still must estimate most of the future stream of benefits[9].

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[6] Assessing adjustment lending is a whole other kettle of fish, a kettle which has been fried on several occasions both by the World Bank and its staff (World Bank 1991, 1992, 1993; Pritchett and Summers 1993) as well as others less sympathetic. We exclude adjustment operations from our universe of projects. For a discussion of project performance and adjustment lending, see Isham and Kaufmann (1992).

[7] Little and Mirlees (1992) discuss the degree of importance of economic (versus financial) pricing in World Bank appraisals and the quality of cost-benefit analysis overall.

[8] There is an enormous gap between the ERR calculated *ex ante* and *ex post* (between 6 and 10 percentage points on average) and a huge variability between these two measures (the R2 of regressing *ex post* on *ex ante* only about 0.2). The determinants of this gap have been studied but are difficult to determine (Pohl and Mihaljek, 1992).

[9] Follow-up studies tend to find that even the *ex post* ERRs tend to overstate the "true" rate of return as in many cases, the benefit flows are not sustained as long as anticipated in the *ex post* ERR calculations.

Table 1 shows the basic information about the ERR and overall ratings used in this analysis, decomposed by region, from 1974 to 1993[10]. The average rate of return was 16.1 percent. The ERRs varied substantially across regions, from nearly 18 percent in both South and East Asia to only 14 percent in Sub-Saharan Africa. About 73 percent of projects were rated as satisfactory, ranging from 83 percent in East Asia to only 64 percent in Africa.

Table 1: Summary statistics of project performance (1974-1993)

Region	Economic Rate of return (ERR)		Fraction of projects rated as "Satisfactory"	
Region	Average	Number of projects	Average	Number of projects
All	16.1	1824	0.73	3435
South Asia	17.9	235	0.78	439
East Asia	17.7	340	0.83	588
EMENA	17.1	338	0.81	613
Latin America	15.5	364	0.70	701
Sub-Saharan Africa	14.0	547	0.64	1094

Notes: Includes all projects evaluated by the World Bank's Operations Evaluation Department from 1974 to 1993.
Source: Authors' calculations from OED data.

B. Basic specification and classification of independent variables

In this paper, we are focused only on the relation between selected aspects of

[10] An annual publication by OED on evaluation results (e.g. World Bank 1993) uses this data to examine project performance by a number of characteristics.

governance and project performance. Nevertheless, we must still account for country structural and policy characteristics which, as previously shown (Isham and Kaufmann 1995, Kaufmann and Wang 1995) are determinants of project success. Accordingly, for each governance variable tested, we estimate four specifications which include various degrees of control variables: a) country and structural characteristics only; b) these variables plus regional dummies; c) country and structural characteristics with "policy" variables; and d) these variables plus regional dummies[11].

By estimating and reporting each of these specifications, we are able to explore possible endogeneity of policy variables and governance variables. The independent variables have been classified as follows:

* Exogenous and/or structural variables (denoted Xs), including the country capital/labor ratio, terms of trade changes, and a dummy for project complexity[12];

* Possibly endogenous policy and economic variables (denoted Zs) that could be correlated with each other and/or with the governance variables, including the black market premium, the fiscal deficit, and GDP growth;

* Regional dummies for South Asia, East Asia, Sub-Saharan Africa, Latin America, and Europe and the Middle East.

When only structural variables are included (specifications A and B) the estimate of the

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[11] We did not include sectoral dummies in the base case although there are differences across sectors (whether this is due to real differences or methodologies is unclear). Their inclusion does not appear to affect the results as country portfolio composition does not appear to be correlated with the other dependent variables.

[12] Following Isham and Kaufmann (1995), this includes all integrated rural development, irrigation and drainage, and livestock projects.

partial impact of better governance on project performance could be overstated because of omitted variables bias, conversely, when policy variables are included (specifications C and D), this estimate could understate the true total impact of governance if part of the impact of better governance is through better policies[13].

The inclusion of the regional dummies, which are obviously exogenous, is simply a robustness torture (for us) test. In order to be persuasive we feel the results should survive the introduction of regional fixed effects; otherwise, the results may simply be capturing some other unmeasured historical, cultural or ideological effect that covaries across regions and is perhaps correlated with both project returns and the governance variables.

C. Basic results without governance variables

Three econometric issues related to the project evaluation data deserve mention before reporting the base case results. First, the ERRs are truncated from below as, according to OED convention the lowest ERR reported is negative 5 percent. Thus, unless otherwise noted, the reported results use a Tobit regression[14]. Second, we must match the time period of the

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[13] If the set of equations for determining the rate of return on project with governance (G), exogenous

$$ERR_i = \beta * G_i + \delta * X_I + \alpha * Z_i + \epsilon_i$$
$$Z_i = \gamma * G_i + \eta_i$$

variables (X), and policy variables (Z) is as above, then the partial effect of governance holding all variables constant (including those that normally would be affected) is just β. The total effect of governance, which includes the effect of governance through its effect on policies (Z), is $\beta + \alpha * \gamma$.

[14] In some circles, the Tobit regression is out of favor because it is non-robust, as its parameter estimates depend on the assumption of normally distributed error term. Since a relatively small fraction of this sample is at the truncation point of -5 percent, the Tobit estimates are quite similar to simple OLS (Greene 1981).

time varying variables, such as black market premium or terms of trade, to the period relevant to the dependent variables, the economic rate of return on projects. This is difficult, as the projects are implemented over a long (on average seven years) and variable period and are expected to yield benefits over an extended period as well. While there are arguments in favor of various weights, we use a three year weighted average of the time varying variable, going back from the year in which the project evaluation was done. Third, although the projects vary tremendously in total cost, from $1.7 million to $5.7 billion, we do not weight the projects, nor adjust for heteroskedasticity, as the standard tests did not indicate any conditional heteroskedasticity as a function of project size[15].

The "base case" regressions--without any governance variable--are presented in table 2. In table 2 and in the tables below, we report p-levels of the test whether the coefficient is zero rather than the usual test (t or chi-square) statistics themselves. The p-level is the significance level at which the null hypothesis could be rejected. A p-level of less than 0.05 indicates a rejection of the null hypothesis at (at least) the 5 percent level. As noted above, specification A is the regression of the project ERR on exogenous and structural variables (Xs) alone, specification B is the Xs with regional dummies, specification C is the Xs and other possibly endogenous policy indicators (Zs), and specification D is the full regression: Xs, Zs, and regional dummies.

The results in table 2 are substantially the same as those of Isham and Kaufmann (1995) and hence will not be discussed in any depth. Most of the results are intuitive: ERRs are

[15] In a preliminary version of this paper regression results were weighted, but subsequent analysis revealed that the results were not affected by the weighting (and that we had incorrectly computed the weights).

lower with a larger capital-labor ratio, greater project complexity, a higher black market premia, and a larger fiscal deficit. In addition, even after controlling for all these factors, ERRs are substantially lower in Sub-Saharan Africa and modestly lower in Latin America and EMENA[16].

[16] The regional definitions are based on the (then) standard Bank groupings into Latin America and Caribbean, Sub-Saharan Africa, South Asia, East Asia, and the somewhat mixed bag of Europe, Middle East and North Africa (EMENA).

Table 2: Non-governance determinants of project returns (ERRs): 1974-1987				
	Specification:			
	A Exogenous	B Exogenous with region dummies	C Exogenous and policy	D Exogenous, policy, and region dummies
Exogenous				
ln(capital/labor)	-1.28 (.029)[a]	-1.73 (.050)	-1.34 (.024)	-1.39 (.122)
Dummy for project complexity	-5.80 (.0001)	-5.81 (.0001)	-4.99 (.0003)	-5.06 (.0002)
Terms of trade shock	0.086 (.278)	0.096 (.218)	0.064 (.417)	0.077 (.316)
Policy				
Black market premia			-0.046 (.0001)	-0.040 (.0001)
Fiscal deficit			0.178 (.194)	0.229 (.116)
GDP growth			0.233 (.272)	0.056 (.799)
Regional Dummies[b]				
East Asia		-0.61 (.791)		-2.69 (.246)
Latin America		-3.85 (.140)		-4.90 (.065)
EMENA		-6.13 (.036)		-5.51 (.071)
Sub-Saharan Africa		-8.54 (.0001)		-9.12 (.0001)
Notes: a) p-levels in parenthesis, b) based on World Bank regional classifications. Sample size = 761. Source: Authors' calculations				

Since we focus on the impact of governance variables, we will (as a presentational matter) only report the coefficients of the various governance indicators when added to these four base specifications rather than repeat all the results for each control variable for each regression. Little of substance is lost in not repeating these results: none of the coefficients on any of the variables above--including the black market premia and fiscal deficit--change dramatically or interestingly with the inclusion of any of the governance indicators[17].

D. Measuring "governance"

Discussions of "governance" typically generate more rhetorical heat than empirical light as politics, like religion, is a topic where beliefs are strong and reliable empirical measurement is difficult. Even a consensus on definitions is elusive: what does one mean by "governance" or especially "good governance"?[18]. There is probably agreement on governance in the extremes. A stable democracy where basic prescriptive human rights are honored and with a competent and honest civil service would no doubt receive the label "good governance" from most observers; by contrast, an unstable autocracy where human rights are abused and with a demoralized and corrupt civil service would receive the label "bad governance". There is probably also agreement that the

[17] One final econometric note: in order not to sacrifice too many observations when the non-governance control variables are missing, we imputed the mean value for missing observations on the fiscal deficit and then included in the estimation a dummy variable interacted with these variables for those observations for which the data are imputed. At least in the case where the independent variables are uncorrelated, this procedure produces consistent estimates for the variables with imputed missings (by packing the impact of measurement error due to imputation onto the interactive term) and at least potentially improves the efficiency of estimation of the governance variables by not throwing out any observations with data on governance because of missing values of the control variables.

[18] The World Bank's policy paper defines governance as "the manner in which power is exercised in the management of a country's economic and social resources for development." (World Bank 1992).

quality of governance can be evaluated along at least the following three dimensions: accountability (including legitimacy, institutional pluralism and participation), openness and transparency, and predictability and the rule of law (Brautigam, 1992).

However, even though the many dimensions of "good governance" typically covary (e.g., political stability, transparent rule of law, competent administration, democracy and respect for human rights), they are conceptually, logically, and empirically distinct. There are clearly examples of effective but non-democratic governments (e.g. some East Asian countries), democratic but corrupt governments (e.g. some South Asian countries), and democratic governments which abuse human rights (e.g. some Latin American countries). As an extreme example, the United States was inarguably a democracy in the ante-bellum period, yet it tolerated the most egregious of human rights violations: slavery.

In spite--and because--of all these definitional difficulties, we isolate for analysis only two of the many possible elements of governance: the extension of civil liberties; and the extension of political liberties and type of political regime. As noted, these are regrettably but necessarily narrow aspects of governance. We are ignoring a number of other potentially important factors: we do not treat governmental policy-making (Haggard and Webb 1994), nor directly measure the degree of government accountability (Paul 1992, 1994), nor address political instability (Alesina and Perroti 1993), nor use other indicators of government performance, such as those generated by private rating services for foreign investors (Mauro 1995, Knack and Keefer 1994) . We have chosen the civil and political dimensions for three reasons: they are at least plausibly quantifiable, and empirical measures do exist; they (albeit imperfectly) span the three dimensions listed above--accountability, openness, and the rule of law; and these same indicators of civil and political

liberties are increasingly being tested in cross-country growth regressions.

II) Civil liberties and project performance

A) Indicators of civil liberties

Developing a meaningful cross-country indicator of civil liberties is obviously difficult. There is little international consensus on liberties that ought to be permitted. Moreover, when those liberties about which there might exist some consensus are suppressed, it is almost always done surreptitiously. That said, several large efforts have attempted to rank countries by degree of civil liberties. In this study, we use data from three of these efforts:

* Freedom House[19] (1994 and previous years) has constructed a ranking of civil liberties for 165 countries from 1972 to 1994. This ranking--on a seven point scale--is based upon a fourteen item checklist of civil liberties[20];

* Humana (1986) constructed an index of human rights achievement in 89 countries for the year 1985. This index, on a scale of zero to 100 (actual range is 13 to 98) was based upon the definition of human rights adopted by the General Assembly of the United Nations in 1966 under the International Covenant on Civil and Political Rights;

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[19] This index is more commonly known as the Gastil index, after its originator (Gastil 1987).

[20] The fourteen items are: media free of censorship; open public discussion; freedom of assembly and demonstration; freedom of political organization; nondiscriminatory rule of law in politically relevant cases; free from unjustified political terror; free trade unions and peasant organizations; free businesses and cooperatives; free professional and other private organizations; free religious institutions; personal social rights (e.g. property, internal and external travel); socioeconomic rights; freedom from gross socioeconomic inequality; and freedom from gross government indifference or corruption.

* Coppedge and Reinicke (1990) constructed five series on "polyarchy"[22] in 170 countries for the year 1985. We use "media pluralism" and "freedom to organize" as indicators of two fundamental civil liberties.

While each of these indices of civil liberties are subjective and debatable, their cross correlations are reasonably high, which creates some confidence that they measure the same thing and do so reasonably well (although we note that, since Coppedge and Reinicke used the Freedom House and Humana studies in their own ranking procedure, part of the high correlation between

[22] "The set of institutional arrangements that permits public opposition and establishes the right to participate in politics" (Coppedge and Reinicke 1990). The other series are "fair elections", "extension of suffrage", and "freedom of expression". We do not report the results on these series because they either have less variance and/or capture political freedoms. Consistent with reports reported below on political indicators, they are in no case statistically significant across specifications.

the latter two and former two series is by construction)[23,24]. However, we wish to stress that by using these rankings neither the authors--nor especially the World Bank--place any importance on the ranking for any particular country. Moreover, by using these numbers strictly for our cross-sectional econometric exercise, we do not imply acceptance of the numbers nor any comment on the politics, rights, or practices of any country.

B) Civil liberties and project performance

Table 3 shows the results of including each of the measures of civil liberties in the project performance regressions. There is a consistent, statistically significant and empirically large effect

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[23] The correlations amongst the "civil liberties" measures are:

	FH Civil (79-86)	Humana	CR Organize
Humana	0.83		
CR Organize	0.78	0.68	
CR Media	0.81	0.79	0.82

[24] If different observations on "civil liberties," say A (Freedom House) and B (Humana) differ only by independent measurement error then the correlation between the two measures is $\rho = \frac{\sigma^2_{x^*}}{(\sqrt{\sigma^2_{x^*}+\sigma^2_{\epsilon_A}} * \sqrt{\sigma^2_{x^*}+\sigma^2_{\epsilon_B}})}$, where $\sigma^2_{x^*}$ is the variance of the "true" variable and $\sigma^2_{\epsilon_{A(B)}}$ is the measurement error variance for measurement A(B). If the measurement error variance is equal $\sigma^2_{\epsilon_A} = \sigma^2_{\epsilon_B} = \sigma^2_{\epsilon}$ then a correlation of .8 implies the ratio of measurement error (noise) to the variance of the true variable (signal), $\frac{\sigma^2_{\epsilon}}{\sigma^2_{x^*}}$ is about .2.

of civil liberties on the return to projects[25]. Taking the estimates from specification D, if the Freedom House civil liberties index were to improve from the worst (1) to the best (7, as in Costa Rica for all evaluated years), the ERR is predicted to increase by 7.5 percentage points. Similarly, with the estimates using the Humana index, improving from the worst civil liberties (13) to one of the best (91, as in Costa Rica) would improve the ERR by 22.5 percentage points.

Since these civil liberties indices are on a different scale, a more standard method for comparison is to calculate how much the ERR is predicted to increase if each index were improved by one standard deviation (column 5). An increase of this magnitude in the Freedom House index would raise the predicted ERR by 1.6 points; a similar increase in the Humana index would raise the ERR by 5.2 points; a standard deviation increase in "media pluralism" would improve the predicted ERR by 3.1 points.

[25] For the Freedom House and the Coppedge and Reinicke indicators, we have reversed the scales for comparability. Thus, for all indices, a higher value represents more liberties.

Table 3: Impact of civil liberties on project rates of return

	Specification[a]:				Effect of one std. dev. increase on ERR[d]:
	A	B	C	D	
Freedom House Civil (1978-1987)[b] (N=649)	1.81 (.0005)[c]	1.16 (.079)	1.71 (.002)	1.07 (.114)	1.57
Humana (1982-1985) (N=236)	.290 (.003)	.299 (.007)	.296 (.002)	.289 (.013)	5.19
Media pluralism (1983-1987) (N=448)	4.61 (.0001)	4.45 (.002)	3.66 (.001)	3.43 (.026)	3.12
Freedom to organize (1983-1987) (N=448)	3.17 (.0001)	1.81 (.184)	2.41 (.006)	-0.26 (.854)	2.70[e]

Notes: a) for description of the specifications see table 2; b) Annual values from 1978-87. The other three indices are single values extrapolated to cover the listed time period; c) p-levels in parenthesis; d) for the calculation in column V, the standard deviations--for the entire sample for which each variable is available--are 1.47, 17.97, 0.91 and 1.12 respectively (see appendix table A1.1); e) uses estimate from column C. Source: Authors' estimates.

This finding of a positive relationship between civil liberties and ERRs is the central positive finding of our paper. We complete this section by showing the statistical robustness of this finding; we argue in the following section that it is plausible that better civil liberties actually are a factor in producing better projects.

One possible concern with the econometric results above is that they are driven by a few outlying observations, as some projects have very high estimated rates of return. We have dealt with that problem in two ways. First, in addition to a Tobit specification accounting for the lower

truncation, we truncated the ERRs above at the more or less arbitrary level of a 50 percent rate of return. This truncation did not affect the results. Second, we in addition to OLS, we estimated specification D using quantile (median) regression, a technique that is more robust to extreme observations. Again, all the civil liberties variables that were significant in specification D in table 3 were statistically significant using median regression estimates.

The results are qualitatively similar with the binary "satisfactory/unsatisfactory" rating. Using only this rating as the measure of project performance allows a larger sample of projects, as social sector projects that normally do not receive an ERR are rated by OED[26]. Table 4 reports the estimates of a Probit regression for specifications C and D (results for A and B were similar). Naturally, since the binary indicator discards a great deal of statistical information, these results are less precise: the p-levels are lower, and the estimates for the Humana ranking are insignificant. For the other variables, the estimates show large increases in the likelihood of a good project when implemented under higher civil liberties. For instance, at the mean of the Freedom House variable, a one standard deviation increase in civil liberties would lower the probability of an unsatisfactory project by 3.2 percentage points, which reduces the predicted failure rate by 16 percent (from the mean of 20 percent). Similarly, a one standard deviation improvement in media pluralism would reduce the failure rate by almost 5 percentage points, or 25 percent from the mean[27].

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[26] See Kaufmann and Wang (1995) for a discussion of the performance of social sector projects as a function of macroeconomic policies.

[27] The comparison between the linear regressions and the Probit effects is complicated, but these magnitudes are roughly similar. That is, if we created a dummy variable for "unsatisfactory" based on the ERR falling below some critical level, then the marginal change in probability of failure from the linear model at a particular point (if the error term were normal) would be $\beta/\sigma * \phi(.)$, where β is the slope coefficient, σ

Table 4: Impact of civil liberties on the probability of a project being rated as satisfactory, using Probit regression.

	Specification:	
	C	D
Freedom House Civil (1978-90)[b] N=1155	.018[c] (.056)[d]	.022 (.060)
Humana (1982-86) N=604	-.00067 (.589)	.0012 (.388)
Media pluralism (1983-90) N=740	.022 (.296)	.054 (.045)
Freedom to organize (1983-90) N=740	.042 (.009)	.040 (.085)

Notes: a) for description of the specifications see table 2, b) Annual values from 1978-87 while for the other three indices are single values for the listed time period; c) the value reported is not the Probit coefficient, but the marginal change in the probability of a successful project as the variable changes, evaluated at the means of all independent variables; d) p-levels of the test that the Probit coefficient is zero in parenthesis.
Source: Authors' calculations

C) Civil liberties and project performance: Disentangling causality

This empirical relationship between performance of projects and civil liberties is striking. Yet the interpretation of this partial correlation is problematic: it may well be that some country conditions cause both greater civil liberties and better projects. We argue in two ways that the results suggest a causative effect from better civil liberties to better project performance. First, prior work suggests that beneficiary involvement and accountability of

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is the error standard error, and $\phi(\ )$ is the standard normal pdf evaluated at a particular point. Taking the values from the regressions in table 3, the means of ERR from table 1, and an estimate of σ gives results from $.0266 = 1.07/14.7 * \phi((16.1-10)/14.7)$ (specification D) and $.042 = 1.71/14.7 * \phi((16.1-10)/14.7)$ which are slightly higher than the estimates of .018 and .022 from Probit.

implementing officials are both key elements of project success: both of these facets of governance could suggest a mechanism for a causal link between civil liberties and performance. Second, we show that the data between manifestations of civil strife and project success show a positive effect that is best understood as a mediating mechanism.

1) Other literature: civil liberties and performance

Experience in developing counties illuminates two aspects of governance related to civil liberties that affect project performance.

Beneficiary involvement and participation. There is increasing consensus among aid agencies that input from and involvement of potential beneficiaries in government investment projects is key to their success (e.g. World Bank 1995). Myriad case studies (e.g., Korten and Siy 1988) illuminate the mechanisms between beneficiary participation and performance. Isham, Narayan, and Pritchett (1995) use data from 121 water projects to show that greater participation by potential beneficiaries directly caused better project performance. It is likely that beneficiary involvement in projects is greater in countries which score higher on a ranking of civil liberties. At least six of the 14 elements of the Freedom House civil rights index, for example, are directly compatible with beneficiary participation in projects: media free of censorship, open public discussion, freedom of assembly and demonstration, free trade unions, peasant organizations, businesses or cooperatives, free professional or other private organizations, and freedom from gross government indifference or corruption.

Public sector accountability. A related dimension of the performance of government projects is the degree to which the public sector officials are held accountable for their

performance. For an extreme instance, Dreze and Sen (1991), in their study of famines elaborate on the fact that no major famine has ever happened in a country with a free press. They postulate that free flow of information forces even non-democratic governments into actions to prevent economic catastrophes such as famines. Empirical studies of accountability are rare, but suggest that the degree to which public sector employees are responsible is an important dimension to performance (Wade 1994, Paul 1996).

Both greater beneficiary involvement and greater accountability of public sector officials are facilitated by an environment in which basic civil liberties--such as the freedom to speak out and the ability of groups to organize to protect and advance their interests--are recognized.

2) Civil unrest, civil liberties and project performance

Another intuitive argument for a causal mechanism between civil liberties and project performance is a chain that runs from civil liberties through indicators of civil unrest to project performance. The data suggest that, controlling for population, higher indicators of civil strife, such as an increased numbers of riots, protest demonstrations and strikes, is strongly *positively* correlated with project performance. This finding at first seems paradoxical, but we show that greater civil liberties are associated with higher values of these civil strife indicators and that, controlling for the degree of civil liberties, there is little additional impact on project performance.

Table 5 shows that countries with high average project performance also have on average much higher levels of civil unrest. When we sort countries into groups based in their

average ERR, we find countries in the "high ERR" category had average rates of return twice as high as those countries in the "low ERR" category. Interestingly, these high ERR countries had many more riots, demonstrations and strikes per capita (adjusted for population effects) than countries with poor project performance[28].

Table 5: Indicators of political and civil unrest by average ERR by country.

ERR category[a]	Average ERR	Number of countries	Regional distribution	Number of projects	Indicators of political unrest, averages per year by country (deviations from population-adjusted means):		
					Riots	Demon-strations	Strikes
High	22.2	6	S. Asia: 3; E Asia: 3	181	2.48	0.30	3.19
Medium	17	11	LAC: 5; SSA: 2; EMENA: 3; S. Asia: 1	253	0.00	0.16	-0.02
Low	11.2	12	SSA: 9; LAC: 2; S. Asia: 1	209	-0.19	-0.04	-0.23

Notes: a) ERR categories are determined by average rates of return classified by country for all countries with at least 10 projects over the period from 1974-1987.
Source: Authors' calculations

[28] The civil unrest variables (riots, protest demonstrations, and strikes,) came as number of incidents per country per year (Banks 1979, updates). This meant that countries with larger populations had a greater absolute number of incidents. However, it did not seem right to simply normalize to per capita, as there is plausibly some increasing returns to scale in civil unrest. Consequently, for each of the three variables we regressed the absolute number of incidents on population*ln(population) (which is equivalent to adjusting the per capita level for the total population in semi-log form) and report the residual of this regression as "excess" civil unrest over the amount expected for a given level of population. The population adjustment was also very significant and the R-squared varied from .02 (strikes) to .18 (riots). The results reported below were unchanged by using other concave functional forms in place of this semi-log form.

That greater civil unrest is associated with better projects appears at first to be puzzling. Typically, such manifestations are thought to be associated with worse performance. However, all the projects in this analysis are financed by governments and, unlike in the private sector, civil unrest does not create the same kind of risks for performance. By contrast, there may be a channel whereby civil tension leads to better project choice and implementation. While markets for private goods rely on information from consumers (expressed in the form of the aggregation of individual purchase decisions made in the market), governments must rely on other channels for expressions of citizen's preferences and for the monitoring of the performance of government agents in carrying out their functions It may be that with more open channels, all forms of expression of popular will--including civil unrest--are greater.

What is the relationship between the indices of civil liberties and riots, strikes, and demonstrations? Table 6 shows that for all indicators except for Humana, greater civil liberties are strongly associated with greater degrees of civil unrest.

Table 6: Correlations between indices of civil liberties and civil unrest			
Civil liberties indicator	*Civil unrest* (all variables adjusted for population effects)[a]		
	Riots	Demonstrations	Strikes
Freedom House (Civil)[b] (1978-87)	.27 (.00001)	.17 (.0001)	.34 (.0001)[c]
Humana (1982-85)	.06 (.34)	-.01 (.87)	.22 (.0002)
Media Pluralism (1983-87)	.14 (.0011)	.24 (.0001)	.29 (.0001)
Freedom to organize (1983-87)	.30 (.0001)	.29 (.0001)	.36 (.0001)
Notes: a) indicators of civil unrest per capita adjusted for total population size as described in footnote 28; b) Annual values from 1978-87. The other three indices are single values extrapolated to cover the listed time period; c) p-levels in parenthesis. Source: Authors' calculations			

Table 7 uses the same regression base specification as above and shows that there is, if anything, a modest positive effect of various indicators of civil unrest on project returns. In both of the specifications without regional dummies, the number of riots, protest demonstrations, and political strikes are *positively* and significantly related to the rate of return. Projects apparently do better in environments with greater civil strife when civil liberties are not included as a determinant (e.g. a coefficient of 0.56 in specification A for

riots). However, with the addition of any of the indicators of the degree of civil liberties[29], the impact of political manifestations is reduced in magnitude. For instance the coefficient on riots falls from 0.56 to 0.32 in specification A. That is, for any given level of civil liberties, neither riots nor strikes are associated with better performance, but protest demonstrations seem to still have some independent affect.

The results support a chain of causation that runs from greater civil liberties to higher levels of the citizen's involvement--including civil manifestations--and to better projects. This is not to suggest that civil unrest is itself the mechanism: it is more likely that environments in which civil unrest is possible are also those in which other mechanisms for expression of popular (dis)content with government performances are available and effective.

[29] Only the Freedom House civil indicator is shown in table 8, but the results for the other three are similar.

Table 7: Indicators of civil unrest and project returns, without and with controls for civil liberties.

	Specification[a]:				
	A		C		D with Freedom House
	without	with Freedom House	without	with Freedom House	
Adding just riots					
Riots	0.56 (0.062)[b]	0.32 (0.148)	0.42 (0.040)	0.21 (0.34)	-0.34 (0.245)
Freedom House Civil	-	1.48 (0.090)	-	1.51 (0.093)	1.19 (.083)
Adding just protest demonstrations					
Protest demonstrations	1.04 (0.0001)	0.88 (0.014)	0.81 (0.003)	0.68 (0.013)	0.17 (0.607)
Freedom House Civil	-	1.46 (0.053)	-	1.48 (0.006)	1.08 (.112)
Adding just political strikes					
Political strikes	1.58 (0.127)	0.201 (0.857)	1.67 (0.097)	0.45 (0.683)	-0.81 (0.520)
Freedom House Civil	-	1.77 (0.002)	-	1.61 (0.006)	1.09 (.109)
Adding all three civil strife variables					
F-test[c] for all three indicators without and with civil liberties	4.39 (0.004)	3.66 (0.012)	2.69 (0.045)	2.30 (0.076)	1.09 (0.352)

Notes: a) for a description of the specifications see table 2; b) p-levels in parenthesis; c) F-tests calculated with and without all three indicators. Sample size = 649.
Source: Authors' calculations.

IV) Political regime type, political liberties and project performance

Civil and political liberties are undoubtedly associated with each other and with democratically-elected governments. Yet there is a clear analytical distinction among these two types of liberties and the type of political regime: for example, the degree of civil and political liberties varies widely among non-democracies. Therefore, finding that more civil liberties are associated with better ERRs does not imply that different types of political regimes are associated with better performance. To try to disentangle these relationships, we test for the possible association between ERRs and these two related aspects of governance: political liberties and political regime type.

A) Political liberties

The most widely used measure of political liberties is an index also published by Freedom House, based on 11 indicators of political rights[30]. Like the ranking of civil liberties, it is a subjective ranking from 1 to 7[31]. Another possible measure of political liberties is the index of human rights violations (IHRV) constructed by Pourgerami (1988), based on reports of Amnesty International on the extent of human rights abuses for the years

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[30] The eleven are: chief authority recently elected by a meaningful process; legislature recently elected by a meaningful process; fair election laws; fair reflection of voter preference in distribution of power; multiple political parties; recent shifts in power through elections; significant opposition vote; freedom from domination by the military, foreign powers, and other powerful groups; no major group or groups denied reasonable self-determination; decentralized political power; and informal consensus (de facto opposition power).

[31] In many studies (e.g., Helliwell 1992), these two closely correlated indices are summed to create one overall index of liberties.

1984-86. It takes a value of 4 for the least and 1 for the most human rights abuses[32].

Table 8: Political liberties and project performance				
	Specification[a]:			
	A	B	C	D
Freedom House (Political)[b] (N=649)	1.16 (.0087)[c]	-.016 (.977)	1.05 (.026)	-.115 (.840)
Index of Human Rights Violations (IHRV) (N=425) Dummy variable for each level of violations (default is most violations, IHRV=1)				
IHRV=2	5.46 (.018)	3.33 (.193)	4.23 (.078)	2.92 (.292)
IHRV=3	0.08 (.974)	1.66 (.534)	1.30 (.586)	3.04 (.310)
IHRV=4 (least violations)	0.90 (.788)	3.96 (.297)	4.87 (.154)	7.83 (.045)
Notes: a) for description of the specifications see table 2; b) Annual values from 1978-1987. IHRV is a single value extrapolated to cover 1980-1986; c) p-levels in parenthesis. Source: Authors' calculations				

The results reported in table 8 do not show any striking positive impact of purely political rights on ERR. The Freedom House index shows a significant positive effect in the least demanding specification (A), but whereas civil liberties is robust, the political result is not. It is driven out in significance by the policy controls and, in both magnitude and significance, by the inclusion of regional variables.

The index of human rights violations (IHRV) similarly does not show any clear pattern of impact on project performance. Although in specification D there is some significant effect, the result is highly non-robust and appears to be driven by a few observations with very

[32] Actually, the highest possible value on the scale is 5, which only one country, Jamaica, achieves so for our purposes Jamaica is re-classified to 4, the level which includes Costa Rica, Venezuela, Mexico, Singapore and Nigeria from 1984-86.

high ERRs[33]. Besides the possible distinction between the top and the bottom, the results show no clear pattern amongst levels of the index. In most of the specifications, while countries with the second to worst amount of violations (IHRV=2) do better than countries with the most violations, they also do much better than countries with an even better record (e.g. 5.46 for IHRV=2 versus 0.08 for IHRV=3 in specification A) and about as well as those with the best record (e.g., 3.33 for IHRV=2 versus 3.96 for IHRV=4 in specification B). Therefore, while there is some mild evidence that it is better not to be in the worst group, there are no discernible distinctions amongst the other levels of IHRV[34].

These weak results on the importance of civil liberties are the result of introducing the political variable into the base specification without any indicator of civil liberties. If we ask what the effect of political liberties are, conditional on the level of civil liberties we find that the civil liberties indicators retain all of their importance while the Freedom House political liberties variable produces weak, or even results which suggest a greater level of political liberties, holding civil liberties constant, worsens project performance. Table 9 shows that, controlling for civil liberties raising political liberties actually reduces the ERR. While not too much should be read into these results (as the multicollinearity problems involved with the estimation of the variables together are severe) these do strengthen the interpretation that civil liberties are of primary importance in explaining project returns.

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[33] For instance in a linear regression (for simplicity), while the coefficient is 1.96 with Tobit estimation (in specification D), it falls to only -.027 in a median regression. Similarly, if the ERRs are truncated above at 50 percentage points, the estimate falls to 1.1 (with a p value of .207).

[34] Moreover, being in the worst group by this indicator may simply indicate that the country is involved in a serious civil conflict, and hence one would expect disruption of projects independent of any exogenous impact on liberties.

Table 9: Estimated impact of political liberties on project returns (ERR) while introducing civil liberties variables.					
	Civil liberties variable included in specification D				
	None[a]	Freedom House (Civil) (1978-87)	Humana (1982-85)	Media Pluralism (1982-87)	Freedom to Organize (1982-87)
Freedom House (Political)	-.115 (.840)[b]	-2.35 (.013)	-1.44 (.241)	-1.17 (.175)	.040 (.967)
Civil liberties variable		3.33 (.0033)	.365 (.006)	4.53 (.009)	.216 (.906)
N	649	649	236	448	448
Notes: a) same regression as table 8, b) p-levels in parenthesis.					

B) Political regime type

The first indicator of regime type, developed by the Center on Institutional Reform and the Informal Sector (IRIS) and labeled here as the "IRIS Indicator of Regime Type" (IIRT), places countries annually in one of five classes: democracy (IIRT=5), partial democracy; transition regime, partial autocracy; and autocracy (IIRT=1). Matched with our project/policy data set, this includes annual observations from 1974-1987 for 51 countries. Since this indicator of different regime types is not (necessarily) a cardinal variable, we include a dummy variable for each type. The second indicator, constructed by Alberto Alesina et. al. (Alesina et al. 1992) and labeled here the "Alesina Democracy Index" (ADI), is an annual ranking of countries by democratic status on a scale of one (most democratic) to

three. We use the annual observations from 1974-1982 for 48 countries.

The results from including these either of these two measures of political regime type in the base specifications are emphatically ambivalent (table 10). The lowest ranking group of countries by IIRT, the "autocracy", tends to have a lower ERR than other categories (as evidenced by the positive signs for most of the others). In specifications A and C (without regional dummies), IIRT categories 3 and 5 (most democratic) tend to have higher returns, while in specification D none of the differences are empirically or statistically significant. Using the ADI, we also find in specifications A and C some weak evidence that more democratic regimes tend to have higher returns, but this is reversed by the inclusion of regional controls.

Moreover, except for a comparison between the "best" and "worst" regime type, there is no clear pattern to the results. For instance, the increment to returns over the autocracies is nearly as high when IIRT=3 as when IIRT=5, and countries with IIRT=4 (partial democracy) are predicted to have an ERR *lower* by 3.4 percentage points than even autocracies. The most democratic (ADI=1) countries are also predicted in specification D (at a very low level of significance) to have lower returns than autocracies.

Table 10: Returns and political regime type.				
	Specification[a]:			
	A	B	C	D
IRIS Indicator of Regime Type (IIRT) (1974-1987[b]; N=725) Dummy variable by regime type (default is least democratic, IIRT=1)				
IIRT=2	-0.48	-0.56	0.24	0.49
	(.767)	(.733)	(.885)	(.766)
IIRT=3	5.46	1.61	3.52	1.04
	(.107)	(.636)	(.296)	(.757)
IIRT=4	-0.076	-3.68	-0.82	-3.35
	(.967)	(. 058)	(.657)	(.091)
IIRT=5 (most democratic)	3.94	0.322	4.17	0.458
	(.055)	(.892)	(.043)	(.847)
Alesina democracy index (ADI) (1974-1982[b]; N=369) Dummy variable by democracy level, default is least democratic (ADI=3)				
ADI=2	3.10	2.86	2.38	2.41
	(.225)	(.257)	(0.349)	(.345)
ADI=1 (most democratic)	2.93	-1.27	1.93	-1.52
	(.117)	(.542)	(.311)	(.465)
Notes: a) for description of the variables included in each specification see table 2; b) Annual values for time period; c) p-levels in parenthesis. Source: Authors' calculations.				

In summary, there is no clear pattern that suggests that countries with more democratic regimes (as classified by the available indices) have better projects, as measured by ERRs. The very least democratic countries perhaps do more poorly than others, but moving towards a democracy from other levels not have any empirically discernible impact on project returns.

C) Other literature: political freedom and performance

These ambiguous findings roughly agree with other assessments of the degree of political freedom on aggregate economic performance. There is a sizeable literature which examines the impact of "democracy" on aggregate growth (e.g. Weede 1983, Scully 1988, Helliwell 1992, Barro 1994, Bhalla 1994, see Alesina and Perotti, 1994 for a review), much of which uses the Freedom House index of political liberties[35] as the measure of democracy. While it is quite difficult to reconcile the strikingly different findings of these papers, in spite of the fact they use almost identical dependent variables (economic growth) and measures of political freedom, we think a fair summary of the current state of the macro level literature on economic growth and political freedom would be involve six findings.

First, higher *levels* of income are associated with higher *levels* of the Freedom House index of political liberties. Second, when some covariates are added, the *level* of the Freedom House index of political liberties does not have independent explanatory power for *growth* of per capita income. Third, controlling for reverse causation--from economic growth (hence higher levels of income) to political liberties--reduces the estimated effect of political liberties on growth. Fourth, the effect of political liberties on growth seems to be non-linear, the middle levels of the index (e.g East Asia) have higher levels of growth than either very low (e.g. OECD) or very high (e.g. Africa) levels. Fifth, as with nearly all growth regressions, a great deal depends on how the newly industrializing economies of East Asia are treated. This

[35] Or the sum of the two Freedom House indicators. Two other studies--(Kormendi and Meguire 1985, Greir and Tullock 1989)--use dummies based on the Freedom House civil index in cross-country growth regressions.

is especially important for political questions, as the East Asian countries were by and large modestly authoritarian but had very rapid growth.

V What do the rates of return indicate?

We have established two results: higher levels of civil liberties are associated with better performance on World Bank-financed projects, and purely political liberties and the type of political regime do not affect project performance. How should these findings be interpreted?

So far, we have used project ERRs as an indicator without being specific about exactly what they are an indicator of. Since the World Bank finances only a fraction of aid-financed projects--and an even smaller fraction any particular government's investment portfolio--it cannot be assumed that the ERRs of Bank projects are representative of overall government returns. Do these results apply to all aid-financed projects? Is performance of government-implemented projects a proxy for overall government efficacy? More broadly, does the return on these aid-financed government projects reflect the return to all investments? We address these questions in the next three sections.

A) Are Bank projects unique among aid projects?

There is little reason to believe that World Bank-financed projects are chosen very differently than projects of other donor agencies. Moreover, it is particularly unlikely that the selection process for projects at the World Bank is biased in such a way as to produce results for a relationship between projects and governance that would not apply to projects of other

donors.

B) Government performance?

The more difficult and important questions is whether the ERRs of World Bank-financed projects indicate a degree of the efficacy of government across countries. There are arguments for and against this supposition.

On the one hand, since all countries are treated alike by the World Bank in terms of project selection and fund availability, it is likely that systematic differences in project returns do reflect country specific, rather than Bank specific factors. The Bank is quite centralized and the internal standards for project selection, appraisal, review, implementation and supervision are uniform across countries[36]. In addition, in the determination of lending allocation--especially of "soft" IDA loans--there are pressures for an allocation across countries based on considerations other than expected performance of projects. Finally, the World Bank's Articles of Agreement have always been interpreted in such a way as to prevent an explicit consideration of political factors so that project selection at least in theory should have been exogenous with respect to the variables we are considering. Together, these factors suggest that differences in ERRs across countries probably do not reflect large differences in Bank treatment nor in project selection rather it is likely that these differences reflect real differences in government investment returns across countries.

On the other hand, this cannot be established. Countries choose which of their possible

[36] This was even more true in the period preceding the reorganization of 1987 which decentralized to the regions many formerly central functions.

set of projects to finance through the World Bank. This choice may involve "cream skimming" --governments seeking Bank financing for projects with very high expected ERRs--or "laggard dumping"--governments offering the Bank the most problematic projects. To the extent that the mechanism whereby the government and the Bank agree on which projects will be financed differs across countries, the average return across countries cannot be interpreted as reflecting government performance.

The most worrisome fact against an interpretation of ERRs as an indicator of government efficacy is their lack of correlation with other measures of government efficacy. The Business Environmental Risk Intelligence (BERI) and International Country Risk Guide (ICRG) data rank countries by various characteristics that indicate their attractiveness for foreign investment--e.g., red tape encountered, corruption, and bureaucratic delay. These various measures are not significantly correlated with the ERRs in our data set: they are not good measures of the same thing. It is possible that these private sector ratings are flawed indicators of government effectiveness; they are designed for foreign investors, and governments that are not attractive to foreign investors may be reasonably effective in implementing their own projects. Nevertheless, the lack of correlation of project performance with other indicators of government efficacy does raise questions.

C) Are projects returns a proxy for overall returns to investment?

In earlier work on the effect of policy distortion variables--e.g., the black market premia--on project performance (Isham and Kaufmann 1995), it has been argued that the ERRs of World Bank-financed projects are reasonably representative of overall investment performance. How closely related are overall returns to capital and these ERRs? This is difficult to answer as the economy-wide return to capital is almost never measured.

A simple growth accounting exercise can circumvent this measurement problem. Suppose that growth of output per worker can be decomposed into the growth of capital per worker and a residual as in equation 1:

$$\dot{y} = \alpha_k * \dot{k}$$

where lower case letters represent per worker and the "dot" represents the percentage time rate of growth. In a neoclassical (Solow) framework, the coefficient on capital is just the share of capital total output,

$$\alpha_k = \frac{r*K}{Y}$$

We typically do not observe r, the return on capital. However, we hypothesize that r for each country I varies systematically across countries with the observed rate of return on projects, ERR:

$$r_i = \bar{r} + \beta * ERR_i$$

We can combine these three equations and estimate the following equation:

$$\dot{y} = \bar{r} * (\frac{K}{Y}) * \dot{k} + \beta * ERR * (\frac{K}{Y}) * \dot{k}$$

so that the first term identifies the average rate of return to capital and the second parameter the impact of an increase in ERR on the overall return to capital. The results of estimating this equation using cross national data are presented in table 11. The estimated average return varies between 10.2 and 17.8 percent, a reasonable range of values. The impact of ERR on the overall rate of return is between 0.44 and 1.08 (with just two countries excluded). The estimates suggest that the return on Bank projects, the ERR is related one-for-one to the economy-wide rate of return which suggests it is a very good proxy for overall investment performance. This small piece of econometric evidence fortifies the arguments in earlier work for the use of the ERR as an indicator of the economy-wide rate of return.

However, the multicollinearity problems in identifying the interactive term are extremely severe. With just two variables, over 50 percent of the overall growth rate variance is explained and hence the F-tests of joint exclusion are overwhelming. However, the estimates of each term individually are very imprecise and cannot reject zero (or any other value for that matter) for the the individual terms. We are obviously not happy with this, but see no solution.

Table 11: Relationship of overall returns to capital and the country average of project rates of return (ERR).				
	Unweighted		Weighted by number of projects[a]	
	Full	Without outliers[b]	Full	Without outliers[b]
Return to capital	.178 (.107)[c]	.102 (.116)	.163 (.119)	.106 (.878)
Impact of ERR on return to capital	.439 (.750)	1.08 (.821)	.626 (.705)	1.06 (.722)
R-Squared	.450	.507	.345[d]	.506[d]
N	39	37	39	37
Notes: a) observations are weighted by the square root of the number of projects, b) the two outliers excluded are Syria and Pakistan, c) standard errors in parentheses, d) R-squared of the unweighted dependent variable. Source: Authors' calculations.				

Conclusion

No one would pretend that the degree of civil or political liberties or the choice of political regime is--or ought to be--based on an assessment of strictly economic costs and benefits. What is often meant by the definition of "human rights" are exactly those elements of the interaction of human beings that go beyond any social welfare calculus.

That said, we have presented empirical evidence that, beyond their intrinsic merit, civil liberties have direct instrumental benefits in improving the performance of a least a subset of government investment projects, those financed by the World Bank. We believe that this is an additional piece of evidence for the view that increasing public voice and accountability--

through both participation and better governance--can lead to greater efficacy in government action, including development assistance (Picciotto 1994; OECD 1995).

On the other hand, the empirical evidence does not provide evidence of a relationship between "democracy" and the particular performance indicator that we examine (although we hasten to emphasize the statistical fact that lack of evidence *for* is not necessarily evidence *against*). This merely suggests with microeconomic data that which is known from aggregate data: while some authoritarian governments have not provided economic benefits, other countries under authoritarian regimes (particularly in East Asia) have experienced efficacious governments, widespread economic growth, and enormous reductions on poverty.

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Appendix Table A.1: Summary statistics of independent variables[a]					
Variable name[b]	Mean	Standard Deviation	Range (Possible)	Number of countries	Years
A) Civil liberties					
Freedom House (Civil)	4.68	1.47	(1 to 7)	56	1974-1990
Humana	55.13	17.97	(13 to 91)	38	1986
Media Pluralism	2.50	0.91	(1 to 4)	56	1985
Freedom to organize	2.45	1.12	(1 to 4)	56	1985
B) Political Rights					
Freedom House (Political)	4.73	1.85	(1 to 7)	55	1974-1990
Pourgerami	2.35	1.08	(1 to 4)	49	1984-86
Alesina Democracy Index	2.52	0.79	(1 to 3)	55	1974-1982
C) Indicators of Civil Unrest					
Riots	0.14	1.61	(-3.83 to 17.50)	56	1974-1989
Protest Demonstra-tions	0.29	1.63	(-0.79 to 14.54)	56	1974-1989
Strikes	0.07	0.50	(-0.43 to 3.50)	56	1974-1989

Notes: a) Summary statistics from 1974 to 1990 for the 56 countries with projects in Tobit and IV specifications; b) Data sources in the text and in the list of references.
Source: Authors' calculations.

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